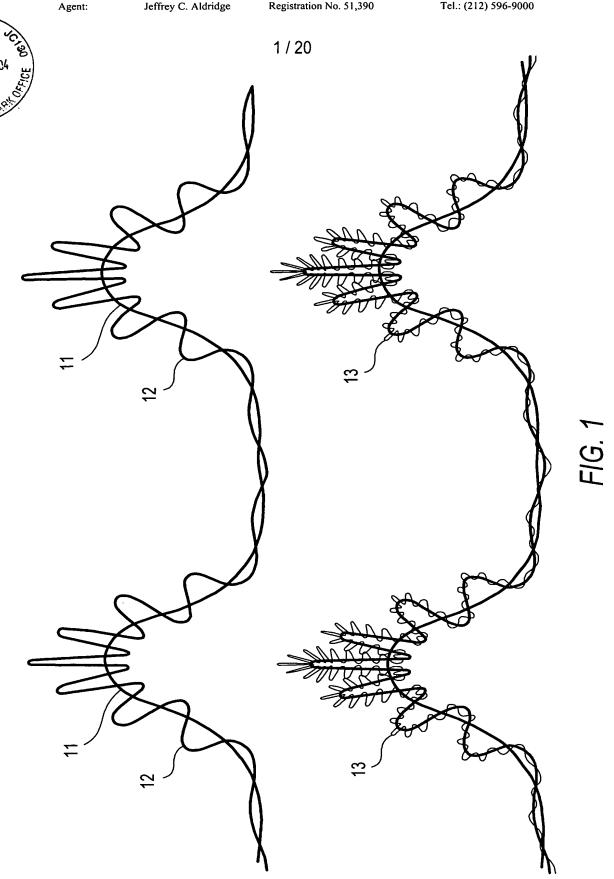
EXPRESS MAILING LABEL NO. EV270268942US

Irving I. Dardik et al. EXPRESS MAILING LABEL NO. EV270268942US Docket No.: ET-2 Filed: December 16, 2003 SYSTEMS AND METHODS OF ELECTROMAGNETIC INFLUENCE ON ELECTROCONDUCTING CONTINUUM Jeffrey C. Aldridge Registration No. 51,390 Tel.: (212) 596-9000



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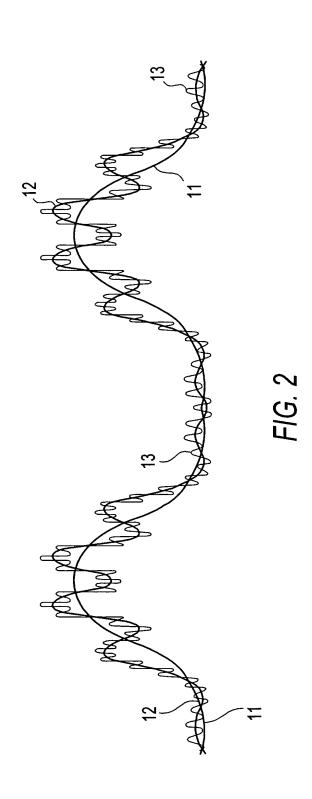
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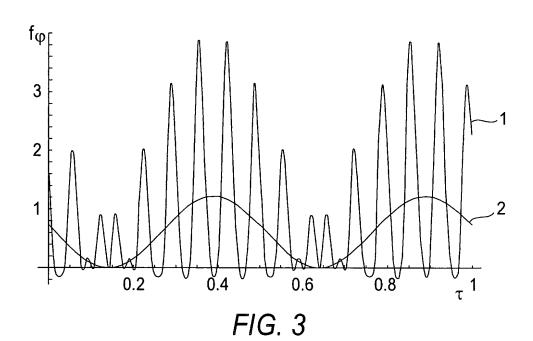
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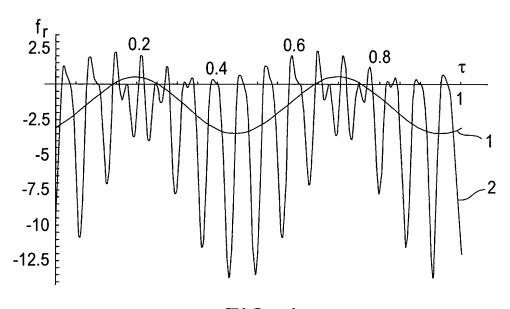


FIG. 4

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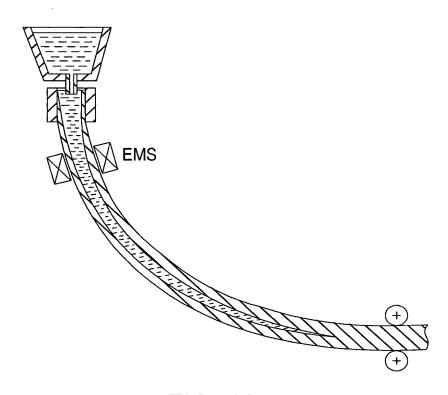


FIG. 4A

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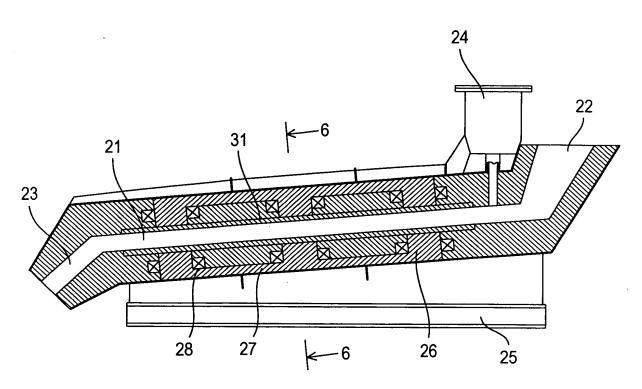


FIG. 5

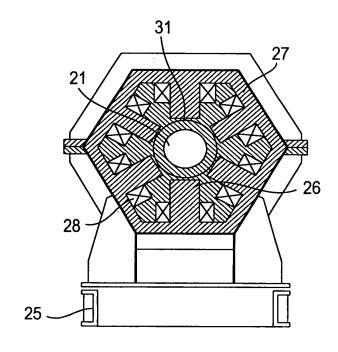


FIG. 6

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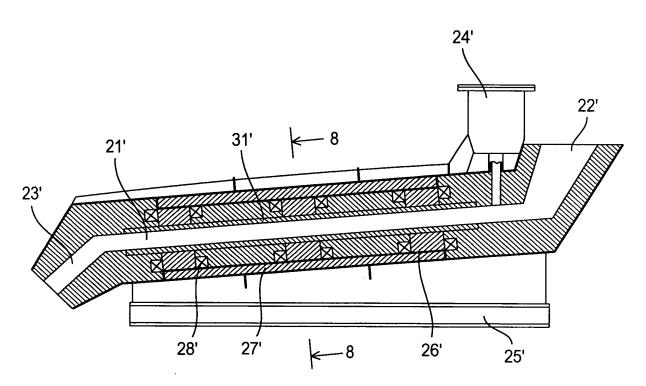


FIG. 7

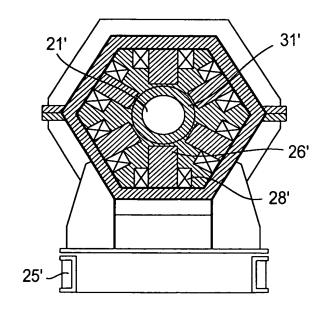


FIG. 8

For:

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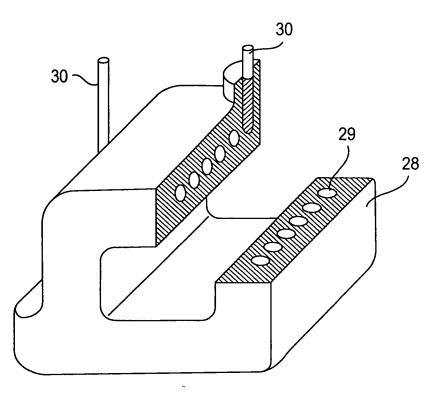


FIG. 9

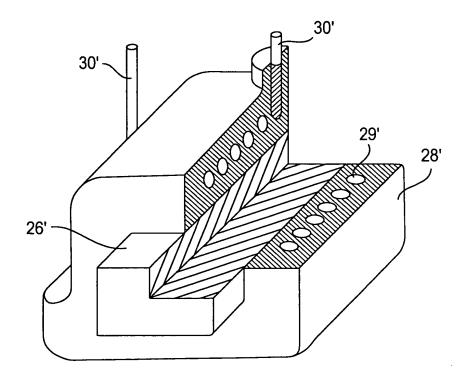


FIG. 10

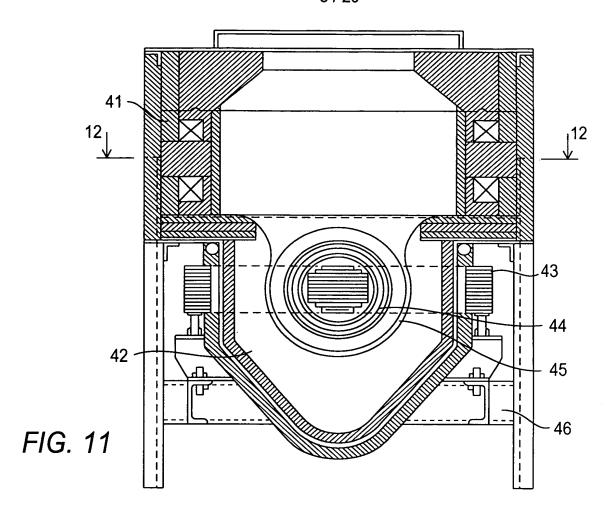
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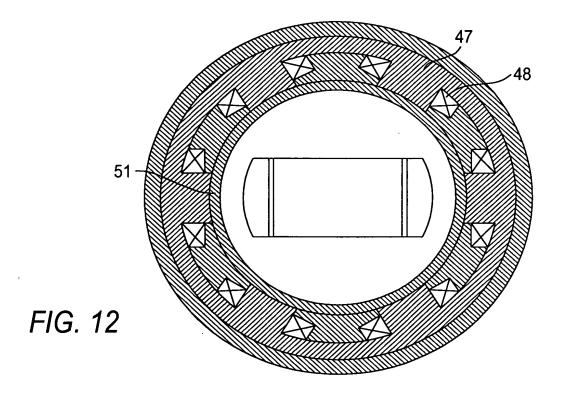
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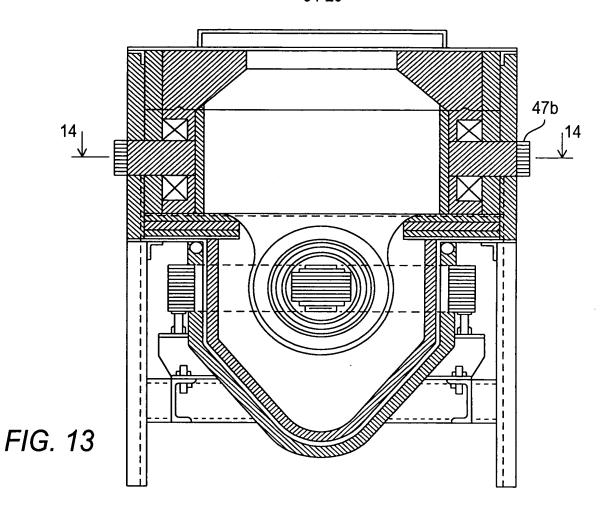
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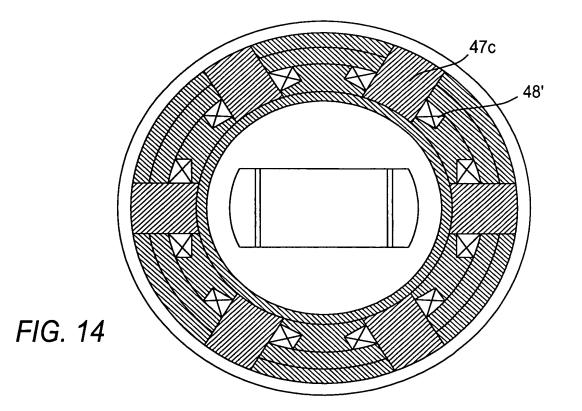




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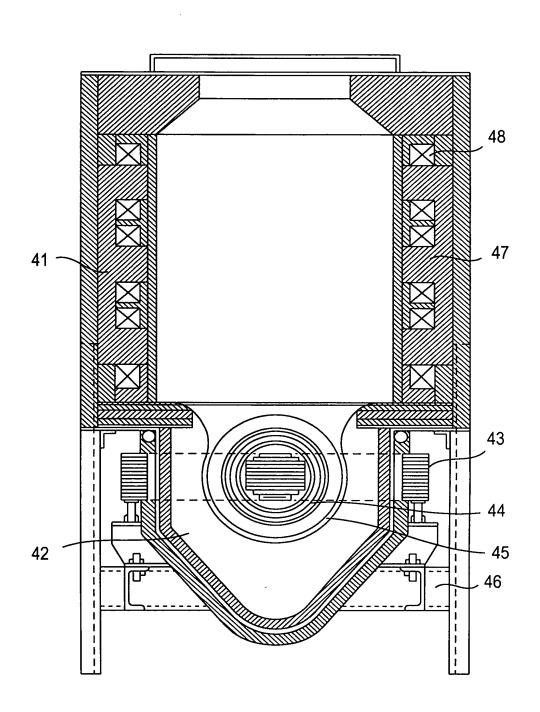


FIG. 15

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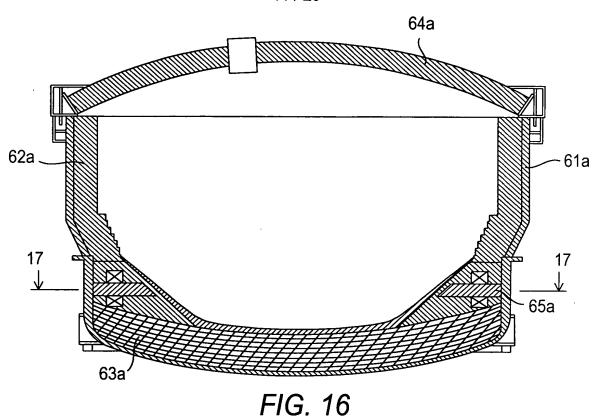
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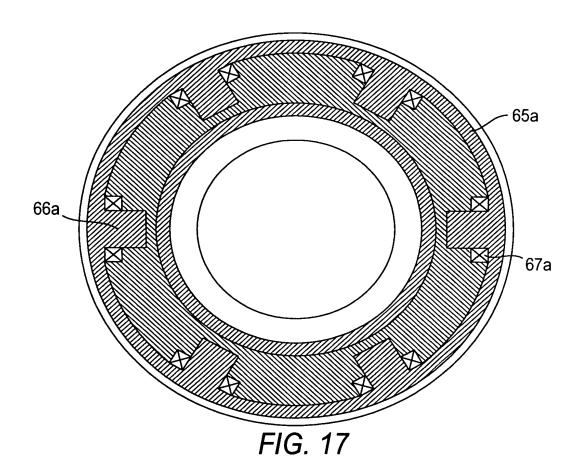
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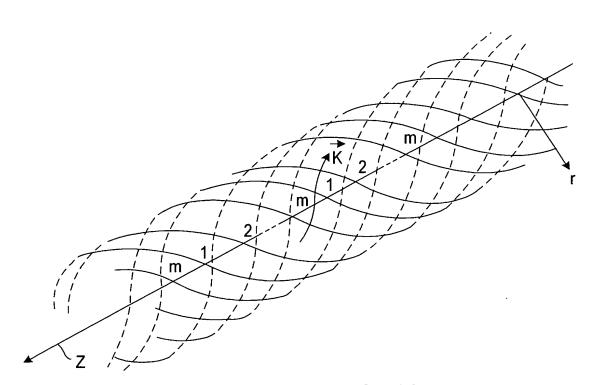


FIG. 18

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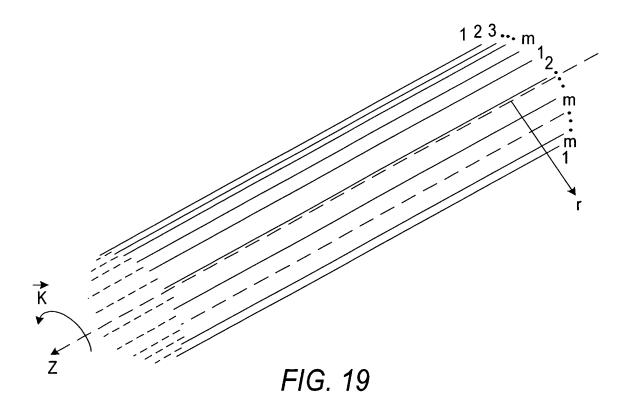
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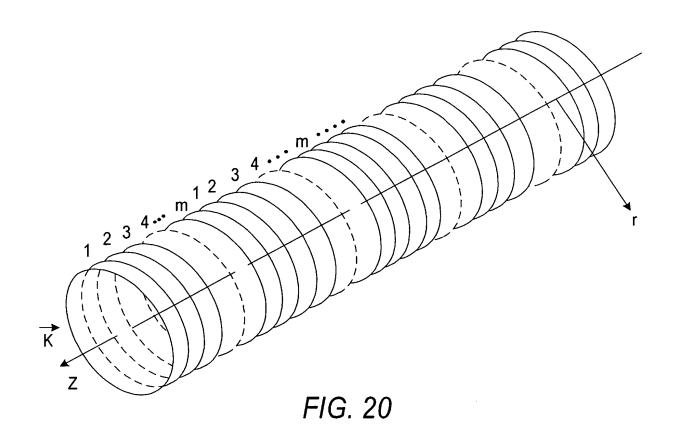
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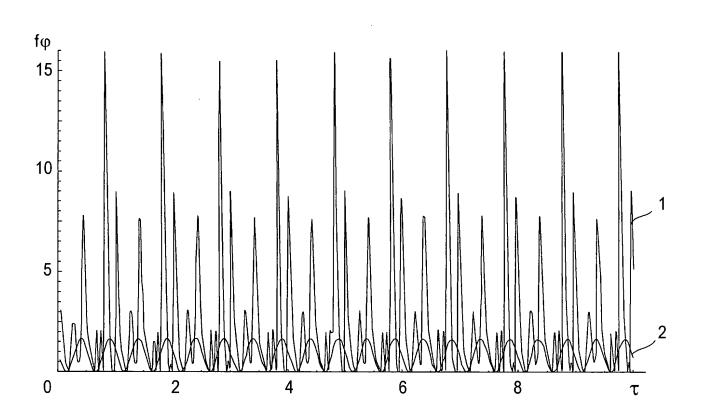


FIG. 21

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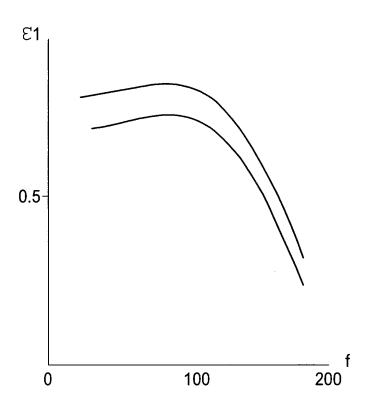


FIG. 22

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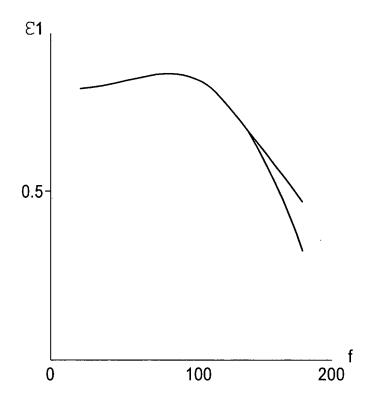


FIG. 23

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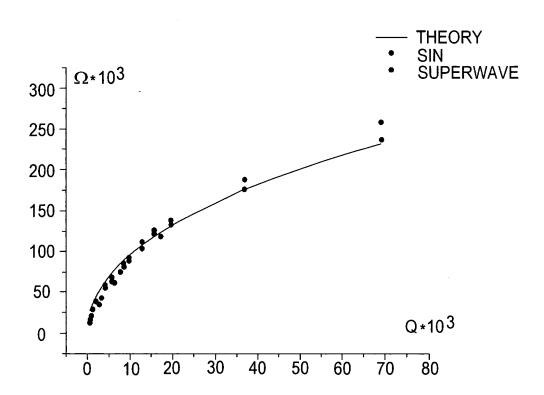


FIG. 24

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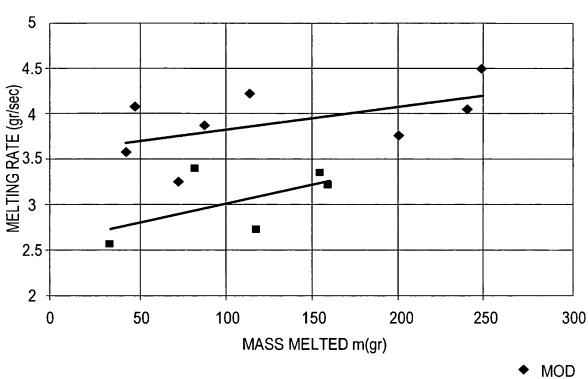
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## ALUMINUM ALLOY MELTING RATE (T=720°C, n=256 rpm)



SIN

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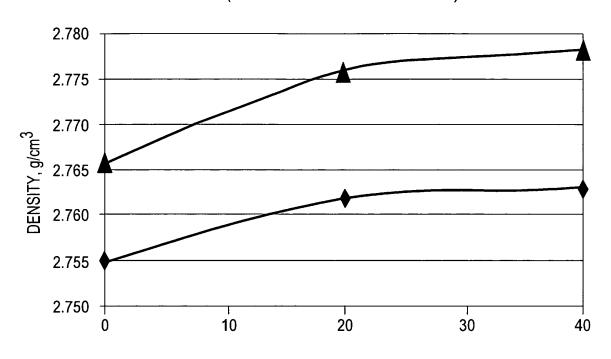
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## RADIAL DISTRIBUTION OF DENSITY (CASTING TEMPERATURE 760°C)



DISTANCE FROM THE INGOT CENTER LINE, mm

SIN 10A 760C OW 10A 760C

FIG. 26